Gun Range

Description

The Gun Range is part of the former Security Training Facility, which is approximately 2 miles east of the Central Facilities Area (see Figure 4 below). Between 1983 and 1990, INEEL security personnel fired approximately 4 to 5 million rounds into targets erected on six earthen berms and in a wooden building (the "shooting house"). An adjacent dry pond is also contaminated. Most of the rounds were directed toward the northern soil impact berm where 10 railroad ties held targets. The bullets fragmented and pulverized on impact with the railroad ties, and with the soil and other bullets in the berm. Some fragments ricocheted beyond the berm into the "kickout" area. Bullet debris extends northward approximately 600 feet. The Gun Range is located in the Naval Gun Range Ordnance Area, therefore the remedy selected for potential UXO will also apply at this site.

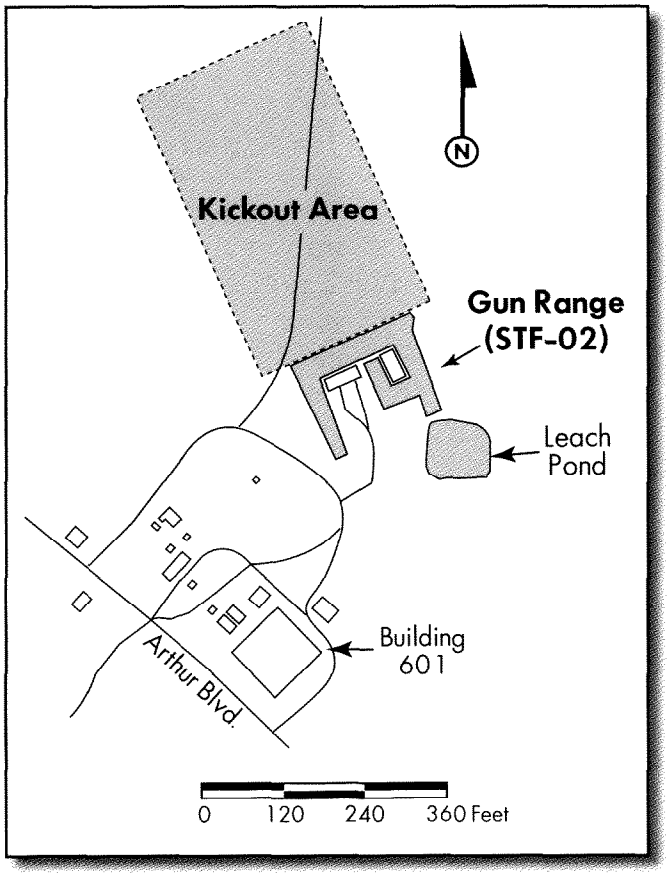

Figure 4. Gun Range (STF-02).

The human health risk at the Gun Range is from lead. Lead exposure could come from breathing or ingesting contaminated soil, dust, or air or eating food grown in soil containing lead or covered with lead-containing dust. If the lead contamination is not remediated, it could potentially result in groundwater contamination. Lead contamination is harmful to humans, especially by damaging the nervous system, kidneys, and immune system. Children are the most susceptible to lead contamination.

Based on records of number and types of bullets purchased for use at the Gun Range, it is estimated that the site contains 64 tons of lead, as well as 3.5 tons of copper. Both of these metals could be recovered for recycling. Concentrations of lead are as high as 24,400 mg/kg (the maximum detected concentration), and extend to a maximum depth of 2 feet. Most of the contamination is in the berms. However, the entire Gun Range site, an area of about 13,000 yd^2, will be remediated to ensure complete removal of sources of risk. The volume of contaminated soil that must be remediated at the Gun Range is approximately 20,000 yd^3, including the berms, the kickout area behind the berms, and the adjacent pond. Most of the lead and copper is in the form of shell casings and large bullet fragments.

The ecological concern at the Gun Range is from lead. Cleanup actions that protect human health from risks posed by lead will also protect ecological receptors from risks. Table 6 (on page 27) lists the human health and ecological risk for the contaminants of concern for the Gun Range (STF-02). Complete details about the investigation of the Gun Range are in Section 14 of the RI/FS.

Evaluation of Alternatives

Three alternatives were developed for the Gun Range. The third alternative has two variations—Alternatives 3a and 3b. Alternatives 1 (No Action) and 2 (Limited Action) were not considered for selection because they would not meet the threshold criteria for protection of human health and the

Table 6. Risk assessment data for the Gun Range (STF-02). [a]

Contaminant of Concern	Detected Concentration (mg/kg)			Preliminary Remediation Goal (mg/kg)	Risk		
					Human Health		Ecological
					Future Residential Scenario		
	Minimum	Maximum	Average		Excess Cancer Risk	Exposure Pathway	Maximum Hazard Quotient
Lead	2.9	24,400	1,303	400	— [b]	Direct exposure; Ingestion of groundwater	2000

mg/kg = milligrams per kilogram
a. Data is from RI/FS Section 14.9.
b. The EPA residential screening level for lead was used to determine the need for cleanup; therefore, calculation of numeric health risk values for lead was not necessary.

environment and compliance with laws. However, the No Action Alternative was evaluated in detail to provide a baseline for comparison of the alternatives as required under CERCLA. Sections 20, 21, and 22 of the RI/FS provide complete details about the alternatives. Evaluation of the alternatives led to the selection of Alternative 3a – Removal, Treatment, and Disposal of Soil as the preferred alternative for the Gun Range.

Alternative 1 – No Action

Description. Under the No Action Alternative, no cleanup action of any type would be performed. Environmental monitoring and 5-year reviews would be carried out.

Evaluation. The No Action Alternative would not meet the threshold criteria for protection of human health and the environment and compliance with laws. Long-term effectiveness would be low, because contaminated soil would remain. This alternative would not reduce toxicity, mobility, or volume through treatment. Short-term effectiveness would be high, because no handling or transport of contaminants would be required. Implementability would be high, because annual environmental monitoring inspections and 5-year reviews are already in place. The estimated $3.3 million cost would result mainly from long-term monitoring, which would be required for at least 100 years.

Alternatives 3a and 3b – Removal, Treatment, and Disposal or Return of Soil

Description. Alternative 3 would consist of removal, treatment, and disposal or return of the treated soil. Two variations of Alternative 3 were evaluated, differing in whether the contaminated soil would be treated and disposed of (Alternative 3a) or treated and returned (Alternative 3b).

Alternative 3 would begin with excavation of the site. All soil contaminated with lead above 400 parts per million (ppm) would be excavated (an estimated volume of 20,000 yd^3). The railroad ties would be removed, encapsulated with a substance such as polyethylene or grout, and disposed of, either on-site or off-site. The wooden building and asphalt pads will be removed during clean up activities. The railroad ties, wooden building, and asphalt pads do not pose a risk as there is no pathway for exposure; they are being addressed because it will be necessary to remove them in order to remediate the soil. They are considered a

Alternative 2 (Limited Action) did not meet the threshold criteria for the Gun Range because it would not be protective after the 100-year period (see Section 21.2.2.2 of the RI/FS).

non-hazardous waste. The soil would be physically sorted to remove metal fragments (bullets, casings, etc.), which would be sent off-site for metal recycling. After sorting, much of the soil would be below the remediation goal of 400 ppm for lead and could be returned to the site. The remaining soil that is above the remediation goal would be treated.

Under Alternative 3a, the treatment would be stabilization (with a material such as Portland cement) followed by disposal in the CFA landfill. Under Alternative 3b, the treatment would be washing with an acid to remove the lead from the soil. The treated soil would be returned to the excavation, and the acid from the soil washing would be neutralized, stabilized (with a material such as Portland cement), and disposed of at the CFA landfill.

The site would be recontoured and revegetated as needed. Excavations deeper than 1 foot would first be backfilled with clean soil.

Evaluation. Alternative 3 would meet the threshold criteria for protection of human health and the environment and compliance with laws. Long-term effectiveness would be high, because contaminants and other waste would be removed from the site. For both Alternatives 3a and 3b, reduction of toxicity, mobility, and volume through treatment would be moderate. Although the alternatives would stabilize and remove the contaminants from the site, they would not reduce the toxicity. Alternative 3a would reduce the volume by separating out the contaminated portion of the soil, and would reduce mobility through stabilization. Alternative 3b would reduce the volume through separating out the contaminated portion and washing lead from it. Short-term effectiveness would be high for Alternative 3a, because the treatment technologies and disposal facilities are readily available. Short-term effectiveness for Alternative 3b would be moderate, because treatment requires use of a hazardous substance (acid) and produces large quantities of hazardous waste that would subsequently require treatment and disposal. Implementability of Alternative 3a would be high. Equipment, materials, and personnel are all available. Removal and sorting of firing range soils is commonly conducted. Metal recycling facilities also are available. The soil stabilization called for is a proven treatment technique, and there are many vendors who can perform this treatment. For Alternative 3b, implementability is equally high; however, treatability studies would be required for the soil washing. For both Alternatives 3a and 3b, facilities to dispose of the contaminated soil, treatment residues, and debris are available and existing information indicates that the soils and debris would meet the acceptance criteria for these facilities. The estimated cost for Alternative 3a is $3.5 million. The estimated cost of Alternative 3b is $8.1 million. Each estimated cost includes excavation, transportation, and subsequent treatment including payment of one-time disposal facility fees (a fixed price per cubic yard). The Alternative 3b cost would be higher because of the additional cost of soil washing.

Preferred Alternative for the Gun Range

Table 7 (on page 29) summarizes the evaluation of alternatives for the Gun Range. The preferred alternative for the Gun Range is Alternative 3a – Removal, Treatment, and Disposal. It would protect human health and the environment and comply with laws. It would have high long-term effectiveness because it would remove the contamination. Reduction of toxicity, mobility, and volume would be moderate; although it would not reduce toxicity,

Table 7. Comparison of alternatives for the Gun Range (STF-02).

Criterion	1 No Action	3a Removal, Treatment, and Disposal	3b Removal, Treatment, and Return
Threshold Criteria [a]			
Overall protection	N	Y	Y
Compliance with laws	N	Y	Y
Balancing Criteria			
Long-term effectiveness	○	●	●
Reduction of toxicity, mobility, or volume through treatment	○	◒	◒
Short-term effectiveness	●	●	◒
Implementability	●	●	●
Cost (in millions) [b]			
Capital costs	$0.6	$3.4	$8.0
Operating and maintenance costs	$2.7	$0.1	$0.1
Total Cost	$3.3	$3.5	$8.1

a. An alternative must meet both threshold criteria or it cannot be selected. An alternative either fully satisfies a threshold criterion or does not.

b. Costs are estimated and rounded. Costs are in net present value.

☑ Indicates the preferred alternative
Y Yes, meets criterion
N No, does not meet criterion
● High, most satisfies criterion
◒ Moderate, satisfies criterion
○ Low, least satisfies criterion

it would substantially reduce volume and completely immobilize lead in soil above the remediation goal of 400 ppm. Short-term effectiveness would be high. Implementability of Alternative 3 would be high because equipment, technologies, and personnel are all readily available.

Compared to Alternative 3b, the only other alternative that would meet the threshold criteria, Alternative 3a would have the same long-term effectiveness and the same ranking for reduction of toxicity, mobility, or volume through treatment. Its short-term effectiveness is higher because it does not involve use of a large quantity of a hazardous substance (acid). Implementability is equally high for both Alternative 3a and 3b. The estimated $3.5 million cost is the lower of the two alternatives that would meet threshold criteria.

Based on the information available at this time, the Agencies believe the preferred alternative would be protective of human health and the environment, would comply with laws, would be cost-effective, and would utilize permanent solutions and alternative treatment technologies to the maximum extent practicable. The preferred alternative may be modified or changed by the Agencies in response to public comment or new information.

INEEL-WIDE ECOLOGICAL RISK ASSESSMENT

As part of the overarching concerns at the INEEL for sustaining a healthy environment, the OU 10-04 comprehensive investigation included a comprehensive analysis of ecological risk information available from the 10 waste area groups encompassed by the INEEL environmental restoration mission. Concern about the impact of the INEEL's activities on the environment has been reflected in long-term monitoring, research, and analysis of the environment during the 50 years that the INEEL has been in operation. The purpose of the INEEL-wide ecological risk assessment (ERA) was to compile information from previous investigations of risk to ecological receptors in each waste area group into a depiction of the effects of contamination on the environment of the INEEL as a whole. As such, the INEEL-wide ERA represents the key step in the multiphase process (see Figure 5 on page 31).

More than 200 species of plants and animals can be found on the 890 square miles of the INEEL, either part or all of the year. Given the number of separate species and the numerous and complex interactions between them (for example, predation, herbivory, and scavenging), assessing the potential effects of contamination on ecological receptors requires consideration of many more factors than in a human health risk assessment. As well, the ecological risk assessment must take into account wide variation in ranges, including migration patterns, and the tendency for many contaminants to accumulate as they move up the food chain. Finally, since many plant and animal species on the INEEL have not been extensively studied in terms of their habitat requirements, life cycle, or tolerance to the range of contaminants released, the ERA is subject to a number of areas of uncertainty. These areas were identified by the Agencies in 1997 through 1999 as part of the INEEL-wide ERA planning ("scoping") process. Uncertainty issues relevant to the INEEL-wide ERA are presented in Section 17 and Appendix F of the RI/FS.

Investigations that have been completed for the waste area groups determined that more than 100 contaminated sites across the INEEL pose risks to ecological receptors. These sites were forwarded to the INEEL-wide ERA. Of them, 68 have hazard quotients greater than 10 and thus required evaluation. At 28 of the 68 sites, remediation is in progress or has been completed. Six sites (the five TNT/RDX Contamination Sites and the Gun Range [STF-02], described in this Proposed Plan) were evaluated in the OU 10-04 RI/FS. Contamination sites from the Naval Reactors Facility (WAG 8) were included only qualitatively in the INEEL-wide ERA owing to the different risk assessment methods that had been used. Because the Radioactive Waste Management Complex (WAG 7) and the INTEC Tank Farm (OU 3-14) are still being investigated, information from these areas could not be included in the INEEL-wide ERA.

The OU 10-04 INEEL-wide ERA used lines of evidence approach to support the risk conclusions. Multiple lines of evidence supporting the results of this analysis are presented in Table 17-19 of the RI/FS. These included assessments of the ecologically sensitive areas, ecological sampling on site, the breeding bird survey, long-term vegetation transects, radiological biota studies, air dispersion modeling, biological surveys for sensitive species and/or habitat and the waste area groups ERA summaries.

info Many modeling assumptions and uncertainties are associated with the INEEL-wide ecological risk assessment. Based on the WAG ERAs and other studies, some apparent risk to receptors is evident. Detection of effects to ecological receptors due to low levels (minimal risk) of contaminants over long periods of time is difficult. For these reasons ecological monitoring will be proposed. Monitoring will be focused on detecting possible effects to populations at the facility and providing the necessary data to verify modeling and eliminate uncertainty. The INEEL-wide ecological monitoring program will provide critical information for continuing assessment of this ecosystem of concern. It will also provide the baseline data needed to make informed decisions in the future.

info The ERA "scoping" process is recorded in several key documents, including:

- *Summary Notes of RI/FS Peer Review* (April 9/10, 1997)
- *Transmittal of the Draft Sampling and Analysis Plan, Appendix B: Operable Unit 10-04 Field Sampling Plan (FSP) in Support of Ecological Risk Assessment (KLF-094-97)* (May 19, 1997)
- *Summary Statement, WAG 10 Ecological Risk Assessment Approach* (February 6, 1998)
- *Draft OU 10-04 Work Plan Ecological Risk Assessment Scoping Meeting Minutes* (April 21-22, 1998).

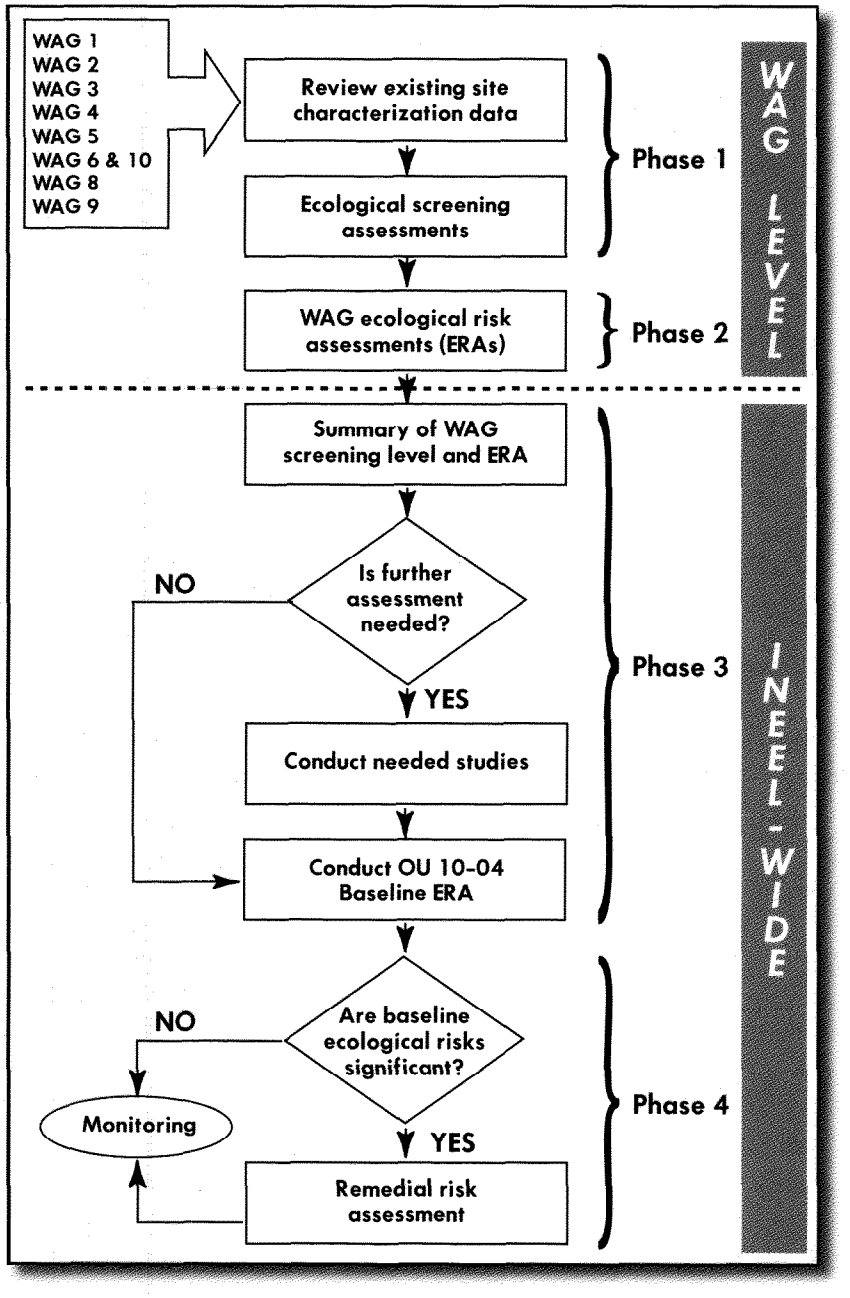

Figure 5. Phased approach to ecological risk assessment used at the INEEL.

The INEEL-wide ERA assumed that contamination from past activities at the WAGs would be fairly confined to within the fencelines of the WAGs (see Figure 6 on page 33), based on evidence from ERA sampling and air modeling. It also assumed that recent CERCLA cleanup activities have or will remove and /or stabilize most of the contamination within the WAG sites eliminating exposures detected by past radiological biotic studies. It was also assumed that no sensitive species were present at the site and that a population model would be adequate. A spatial analysis concluded that less than 20 percent of the habitats present on the INEEL are lost to facility activities and it appears that there is minimal risk to the INEEL's diverse plant and animal species. However, based on the multiple uncertainties and assumptions

in the assessment, it was determined that ecological monitoring would be critical to ensure protection of this important ecosystem.

Remediation of sites for human health risks may also reduce risk to ecological receptors. Remediation is in progress or has been completed at all 28 sites that posed risk to both human health and the environment; one site (STF-08) is being evaluated further under the OU 10-08 RI/FS; and two sites (the INTEC Tank Farm and Tank Farm South) are being evaluated as part of the OU 3-14 RI/FS. Three sites (TRA-39 and TRA-653 and CPP-66) have been determined not to pose a risk to ecological receptors. At the remaining 28 sites, remediation has not yet been conducted. Section 17 and Appendix H of the RI/FS provide specific information about these sites.

In 1975, the INEEL was designated a National Environmental Research Park, making it one of only two in the U.S where the unique sagebrush-steppe landscape can be studied. In 1999, the Sagebrush Steppe Ecosystem Reserve was created on 116 square miles (74,000 acres) in the northwest part of the INEEL. Many of the ecological resources within the Sagebrush Steppe Ecosystem Reserve and INEEL as a whole are of critical ongoing importance to the Shoshone-Bannock Tribes. These opportunities for environmental research and preservation of sensitive cultural resources are possible because, for 50 years, the security restrictions of the INEEL and its predecessors have protected the vast majority of its acreage from the kinds of environmental impacts common elsewhere in the region.

About 100 species of birds, 70 mammals, and 23 amphibians and reptiles in the Great Basin need sagebrush habitat and its associated grasses and forbs for shelter and food. Currently, more than 50 percent of shrub- and grassland bird species in the Great Basin show downward population trends. Sage grouse numbers in the Great Basin have dropped more than 33 percent in the past 15 years, as measured by studies carried out by the U.S. Bureau of Land Management. Although security restrictions have curtailed tribal access to the INEEL, the cultural importance of the ecological resources located there has not diminished in the view of the Tribes.

Human activities will continue to affect the Sagebrush Steppe ecosystem and associated species in the future. Thus, the importance of protecting areas like the INEEL National Environmental Research Park will become even greater.

info The Great Basin is the largest U.S. desert. It covers an arid expanse of about 190,000 square miles and is bordered by the Sierra Nevada Range on the west, the Rocky Mountains on the east, the Columbia Plateau to the north, and the Mojave and Sonoran deserts to the south. This is a cool or "cold" desert due to its northern latitude and higher elevations (at least 3,000 feet, but more commonly 4,000 to 6,500 feet). Precipitation is generally 7 to 12 inches annually.

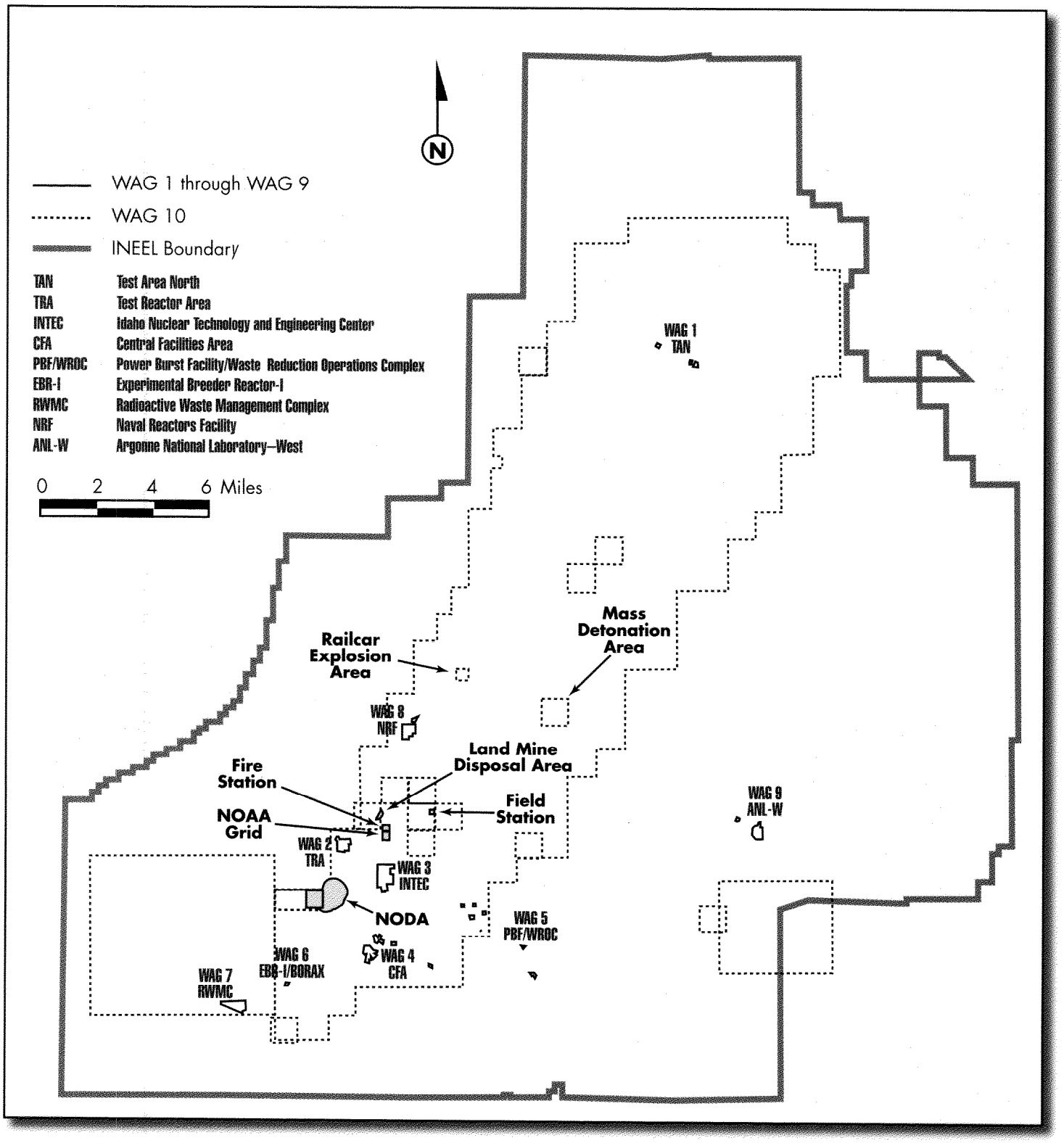

Figure 6. Location of contamination remaining from past activities at the INEEL.

SITES NOT REQUIRING CLEANUP

The Agencies propose that no remediation will be conducted under CERCLA for 41 of the 50 sites in OU 10-04. The comprehensive investigation showed that there is no source of contamination associated with the 34 sites listed in Table 8 below.

The 7 sites listed in Table 9 have contamination left in place that does not present an unacceptable risk to human health or the environment. The status of these sites will be reviewed during the 5-year review process to ensure that site conditions have not changed significantly and the status of each site remains consistent with the record of decision. Established institutional controls for these sited will be maintained until unrestricted release is approved during a 5-year review.

Table 8. Sites not requiring institutional controls or 5-year reviews.

ARVFS-01: Army Reentry Vehicle Facility Site Containers of Contaminated NaK
ARVFS-02: Army Reentry Vehicle Facility Site Tank Containing Low-level Radioactive Waste
BORAX-03: BORAX Argonne Experimental Facility (AEF) Septic Tank (AEF-703)
BORAX-04: BORAX Trash Dump
BORAX-05: BORAX Fuel Oil Tank, Southwest of AEF-602
BORAX-07: BORAX Inactive Fuel Oil Tank by AEF-601
CPP-66: CPP Fly Ash Pit
DF-1: Dairy Farm Disposal Pit
EBR-02: EBR-I Septic Tank (AEF-702) and Seepage Pit (AEF-703)
EBR-03: EBR-I Seepage Pit (WMO-702)
EBR-04: EBR-I Septic Tank (WMO-701)
EBR-05: EBR-I Cesspool, Septic Tank (EBR-709) and Seepage Pit (EBR-713)
EBR-06: EBR-I Septic Tank (EBR-714) and Seepage Pit (EBR-716)
EBR-07: EBR-I (AEF-704) Fuel Oil Tank at AEF-603
EBR-09: EBR-I Fuel Oil Tank at WMO-601 (WMO-704)
EBR-10: EBR-I Gasoline Tank (WMO-705)
EBR-11: EBR-I Fuel Oil Tank (EBR-706)
EBR-12: EBR-I Diesel Tank (EBR-707)
BR-13: EBR-I Gasoline Tank (EBR-708)
EBR-14: EBR-I Gasoline Tank (EBR-717)
EBR-15: EBR-I Radionuclide Soil Contamination
EOCR-01: Experimental Organic-Cooled Reactor Leach Pond
EOCR-02: Experimental Organic-Cooled Reactor Injection Well
EOCR-03: Experimental Organic-Cooled Reactor Oxidation Pond
EOCR-04: Experimental Organic-Cooled Reactor Septic Tank
EOCR-05: Experimental Organic-Cooled Reactor Blowdown Sump (EOCR-719)
LCCDA-01: Liquid Corrosive Chemical Disposal Area Old Disposal Pit (west end)
LCCDA-02: Liquid Corrosive Chemical Disposal Area Limestone Treatment and Disposal Pit (east end)
ORD-02: Naval Ordnance Test Facility
ORD-29: Big Southern Butte
ORD-23: Rifle Range (also called Firing Range)
STF-01: Security Training Facility and STF-601 Sumps and Pits
Telecommunication Cable
ZPPR-01: Zero Power Physics Reactor Disposal Pit (outside ANL-W fence)

Table 9. Sites requiring institutional controls and 5-year reviews.

BORAX-01: BORAX II through V leach Pond
BORAX-02: BORAX I Buried Reactor
BORAX-08: BORAX V Ditch
BORAX-09: BORAX II through V Reactor Building
EBR-08: EBR-I Fuel Oil Tank (WMO-703)
OMRE-01: Organic-Moderated Reactor Experiment Leach Pond
ORD-21: Juniper Mine

REFERENCES

The following list of source material is provided for readers who want more detailed information than is presented in this proposed plan. These documents are available in the INEEL Administrative Record or in other federal archives as indicated. Locations of the Administrative Record are listed in the margin of this page. The titles of the primary sources have been shortened in subsequent entries for convenience.

1. *Record of Decision for the Interim Action of Unexploded Ordnance Locations at the INEL, Operable Unit 10-05*, June 29, 1992.
2. RI/FS, Section 12.3.2.
3. *Comprehensive Remedial Investigation/Feasibility Study Assessment for Waste Area Groups 6 and 10 Operable Unit 10-04*, March 2001, DOE/ID-10807 (RI/FS).
4. 56 FR 50638, "Safe Drinking Water Act," U.S. Government Printing Office, October 7, 1991; available on-line from the National Archives and Records Administration, at **http://www.access.gpo.gov/nara/cfr/cfr-table-search.html**.
5. Letter to EPA and IDHW from DOE-ID, *Request for Extension of the OU 10-04 RI/FS Schedule and Addition of Operable Units Title OU 10-08 and OU 10-09 (OPE-ER-83-99), June 10, 1999*, AR Document No. OPE-ER-83-99.
6. *Agreement-in-Principle between the Shoshone-Bannock Tribes and the U.S. Department of Energy*, September 27, 2000; available on-line at **http://www.id.doe.gov/doeid/BUSINESS/PDF/AIP.PDF** or in the Information Repositories (Agreement-in-Principle).
7. 54 FR 48184, 40 CFR 300, "National Priorities List of Superfund Sites," *Code of Federal Regulations*, Final Rule, U.S. Government Printing Office, July 1997; available on-line from the National Archives and Records Administration, at **http://www.access.gpo.gov/nara/cfr/cfr-table-search.html**.
8. *Federal Facility Agreement and Consent Order for the Idaho National Engineering Laboratory* (FFA/CO), December 9, 1991, AR No. 1088-06-29-120; available on-line at **http://www.em.doe.gov/ffaa/inelcerc.html**.
9. RI/FS Section 7.
10. RI/FS Section 12.
11. RI/FS, Section 2.9.
12. *Preliminary Scoping Track 2 Summary Report for Operable Unit 10-03 Ordnance*, January 1998, DOE/ID-10566.
13. RI/FS, Section 12.4.
14. RI/FS, Section 12.3.3.
15. Agreement-in-Principle.

The INEEL Administrative Record is available to the public at the following locations:

INEEL Technical Library
DOE Public Reading Room
1776 Science Center Drive
Idaho Falls, ID 83415
208-526-1185

Albertsons Library
Boise State University
1910 University Drive
Boise, ID 83725
208-385-1621

University of Idaho Library
University of Idaho Campus
434 2nd Street
Moscow, ID 83843
208-885-6344

The Administrative Record may also be accessed on the Internet at **http://ar.inel.gov**

Any library with Internet access can connect you to the Administrative Record.

Information about Environmental Restoration at the INEEL is available on the Internet at **http://environment.inel.gov**

environment.inel.gov

The INEEL is on the Internet at **http://www.inel.gov**

16. U.S. Department of Energy, Idaho Operations Office, Purchase Order No. DE-AF07-001D00503, issued February 9, 2000, to Shoshone-Bannock Tribes Risk Assessment Project.

17. RI/FS, Appendix I.

18. *Region 10 Final Policy on the Use of Institutional Controls at Federal Facilities*, May 1999, EPA Memorandum.

19. *INEEL Comprehensive Facility and Land Use Plan*, March 1997, DOE/ID-10514.

Public Involvement

Citizens are encouraged to get involved in decision-making at the INEEL. Review this proposed plan and related documents, attend a public meeting or briefing, and provide feedback to the Agencies or INEEL Community Relations Office.

Public Meetings

Two public meetings will be held during the second and third weeks of February 2002. These will be in Boise (at the Doubletree Downtown) and in Idaho Falls (at the Shilo Inn). Prior to each meeting—from 6:00 to 7:00 p.m.—citizens will have an opportunity to discuss the contaminated ground surface investigation and proposed alternatives with agency and project representatives. Immediately following each meeting—at 7:00 p.m.—the Agencies will make a formal presentation, followed by a question and answer session and an opportunity to comment. Public comments will be recorded by a court reporter. Transcripts will be available in the Administrative Record. To arrange briefings in other communities, call the INEEL's toll-free number, 1-800-708-2680.

Public Meetings

Boise, Doubletree Hotel Downtown, 1800 Fairview Ave.
February 7, 2002

Idaho Falls, Shilo Inn, 780 Lindsay Blvd.
February 12, 2002

February

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

Submitting Written Comments

Written comments can be submitted to one of the project representatives at the meeting or mailed. A form is included in this proposed plan for your convenience. Comments must be mailed to the person and address specified on the form. Written comments mailed to any other person or address may not be considered.

This proposed plan is also available on the Internet as an Adobe Acrobat PDF at **http://environment.inel.gov**. An on-line form is also available at **http://environment.inel.gov** for submitting comments.

The Agencies

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Idaho Department of Environmental Quality
1410 North Hilton
Boise, ID 83706
(208) 373-0285 or
(800) 232-4635

More Information

Contact: the INEEL Community Relations Plan Office at 1-800-708-2680

1800 708-2680

Call: Erik Simpson, *INEEL Community Relations representative for Test Area North,* at 208-526-4700 or at **eas@inel.gov,** Community Relations Office, P.O. Box 1625, Idaho Falls, ID 83415-3911

Look on the Internet:

- the INEEL's address is: **http://www.inel.gov**
- the INEEL's Environmental Restoration address is **http://environment.inel.gov**

environment.inel.gov

- the INEEL's Administrative Record address is **http://ar.inel.gov**

SUMMARY OF PREFERRED ALTERNATIVES

The following summary of the preferred alternatives for the WAG 6 and 10 sites covered in this proposed plan is provided for the reader's assistance. The reader should consult previous sections of this plan for more information on the sites and all the alternatives. Additional information is available in the OU 10-04 comprehensive RI/FS.

Sites	Reader Notes
Ordnance Areas **Description:** Three areas totaling 208,000 acres (about 325 square miles) in which World War II-era bombing practice and testing left unexploded ordnance on or below the ground surface. **Preferred Alternative:** 3 – UXO Detection and Removal, and Institutional Controls **Estimated Cost:** $16.5 million **Comments:** Institutional controls would be required because complete restoration or clearance to levels acceptable for unrestricted use cannot be accomplished.	
TNT/RDX Contamination Sites **Description:** Five sites totaling 133 acres with low to moderate amounts of TNT or RDX or both. Contamination ranges from fine particles to lumps and fragments scattered in patches on or within 2 feet of the ground surface. The areas may also contain unexploded ordnance. **Preferred Alternative:** 3a – Removal, Treatment of TNT/RDX Fragments, On-Site Disposal of Soil, and Institutional Controls **Estimated Cost:** $4.3 million **Comments:** Institutional controls would be required because complete restoration or clearance to levels acceptable for unrestricted use cannot be accomplished.	
Gun Range (STF-02) **Description:** The 4 to 5 million rounds of ammunition fired by security personnel during training left approximately 13,000 square yards contaminated with 64 tons of lead. **Preferred** Alternative: 3a – Removal, Treatment, and On-Site Disposal **Estimated Cost:** $3.5 million **Comments:** The site is also contaminated with approximately 3.5 tons of copper.	

Comments (continued)

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Please return this form by February 27, 2002

What's Your Opinion?

*The Agencies want to hear from you to decide what actions to take at the Ordnance Areas, TNT/RDX Contamination Sites, and the Gun Range (STF-02).**

Comments _____

* *If you want a copy of the Record of Decision and Responsiveness Summary, please make sure your mailing label is correct.*

INEEL
Idaho National Engineering & Environmental Laboratory

INEEL Environmental Restoration Program
P.O. Box 1625
Idaho Falls, ID 83415-3911

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